

IFW



HT-03-038

July 30, 2004

To: Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/849,311 05/19/04 |  
Liubo Hong et al.  
MRAM CELL STRUCTURE AND METHOD OF  
FABRICATION  
| \_\_\_\_\_ |

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on August 9, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date S.B. Ackerman 8/9/04


U.S. Patent 6,384,482 to Yang et al., "Method for Forming a Dielectric Layer in a Semiconductor Device by Using Etch Stop Layers," discloses a method for forming a dielectric layer in a semiconductor device by using etch stop layers.

U.S. Patent 6,673,675 to Yates et al., "Methods of Fabricating an MRAM Device Using Chemical Mechanical Polishing," discloses a method for a CMP process involving an MRAM cell in which a WN or TaN layer is used as a cap layer on a MTJ and also functions as a series resistor or as a CMP stop layer.

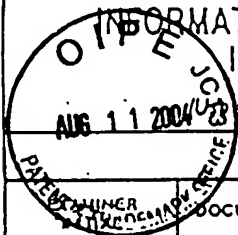
U.S. Patent 6,174,737 to Durlam et al., "Magnetic Random Access Memory and Fabricating Method Thereof," discloses CMP before forming MTJ. A dielectric layer is deposited over the MTJ elements, then openings are etched to the elements.

U.S. Patent 6,649,953 to Cha, "Magnetic Random Access Memory Having a Transistor of Vertical Structure with Writing Line Formed on an Upper Portion of the Magnetic Tunnel Junction Cell," discloses a method of polishing of the dielectric layer to expose the MTJ elements.

Sincerely,

  
Stephen B. Ackerman,  
Reg. No. 37761

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION



(Use several sheets if necessary)

Docket Number (Optional)

HT-03-038

Application Number

10/849,311

Applicant

Liubo Hong et al.

Filing Date

05/19/04

Group Art Unit

## U. S. PATENT DOCUMENTS

| EXAMINER | DOCUMENT NUMBER | DATE     | NAME          | CLASS | SUBCLASS | FILED DATE<br>IF APPROPRIATE |
|----------|-----------------|----------|---------------|-------|----------|------------------------------|
|          | 6384482         | 5/7/02   | Yang et al.   | 257   | 758      | 8/15/01                      |
|          | 6673675         | 1/6/04   | Yates et al.  | 438   | 257      | 4/11/02                      |
|          | 6174737         | 1/16/01  | Durlam et al. | 438   | 3        | 6/24/99                      |
|          | 6649953         | 11/18/03 | Cha           | 257   | 295      | 3/25/02                      |
|          |                 |          |               |       |          |                              |
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## FOREIGN PATENT DOCUMENTS

| DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation |    |
|-----------------|------|---------|-------|----------|-------------|----|
|                 |      |         |       |          | YES         | NO |
|                 |      |         |       |          |             |    |
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## OTHER DOCUMENTS (Including Author, Title, Date, Portion of Pages, Etc.)

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EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.